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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/986,186 12/05/97 PETERSON

T 8757-009

EXAMINER

HM11/0415

PENNIE & EDMONDS
1155 AVENUE OF THE AMERICAS
NEW YORK NY 10036-2711

BRUSCA, J

ART UNIT

PAPER NUMBER

1636

DATE MAILED:

04/15/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
08/986,186

Applicant(s)
Peterson et al.

Examiner
John S. Brusca

Group Art Unit
1636



- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 22-24 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 22-24 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 1636

DETAILED ACTION

1. The group and or Art Unit location of your application in the PTO has changed from the Art Unit assigned to parent Application No. 08/738944. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1636.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

3. The disclosure is objected to because of the following informalities:

4. On pages 36 and 106, the accession number for a recited strain is blank.

Appropriate deletion or insertion is required.

Priority

5. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

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The second application (which is called a continuing application) must be an application for a patent for an invention which is also disclosed in the first application (the parent or provisional application); the disclosure of the invention in the parent application and in the continuing application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *In re Ahlbrecht*, 168 USPQ 293 (CCPA 1971).

Priority is not granted to prior to parent Application No. 08/738944, filed 10/24/96 for the claimed invention because shuttle cosmid vectors are not disclosed in Application No. 08/639255.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

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later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stratagene catalog in view of Losson et al. in view of Strasser et al.

Claim 22 is drawn to a cosmid vector comprising an autonomously replicating sequence (ARS) of *Schizosaccharomyces pombe*. Claim 23 is drawn to the vector of claim 22 further limited to pPCos+ura, which consists of the vector SuperCos 1 into which has been inserted a ura4 yeast selectable marker gene and an ARS. Claim 24 is drawn to the vector of claim 22 further limited to pPCos1, which consists of the vector SuperCos 1 into which has been inserted an ARS and a yeast selectable marker gene ura4 and further comprises a deletion of the neo gene of SuperCos 1.

Stratagene catalog shows the cosmid vector SuperCos 1. Stratagene catalog does not show a cosmid vector comprising a *Schizosaccharomyces pombe* ARS, or vectors pPCos+ura or pPCos1.

Losson et al. shows in figure 1 a shuttle vector pFL20, which comprises an *E. coli* origin or replication, and a *Schizosaccharomyces pombe* origin of replication. Losson et al. shows in the abstract that pFL20 can be used to express genes in *Schizosaccharomyces pombe*. Losson et al. shows throughout that the plasmids replicate in both *Schizosaccharomyces pombe* and *E. coli*., and that the plasmids may conveniently be manipulated in *E. coli*. Losson et al.

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shows that the plasmid can be selected in *Schizosaccharomyces pombe* ura4 mutant strains by complementation of the ura4 gene by a ura3 gene on their plasmid.

Strasser et al. shows in columns 21-22 a yeast cosmid shuttle vector. Strasser et al. shows in column 23 that their cosmid shuttle vector is useful to isolate a yeast gene that complements a defective yeast strain.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the SuperCos 1 cosmid vector shown in the Stratagene catalog by addition of an ARS functional in *Schizosaccharomyces pombe* because Strasser et al. shows the advantages of a shuttle cosmid in the analysis of yeast genes and Losson et al. shows an ARS that is functional in *Schizosaccharomyces pombe*. Regarding the insertion of the yeast selectable marker ura4 in the vectors of claims 23 and 24, it would have been further obvious to insert a yeast selectable marker such as a ura3 or ura4 gene in SuperCos 1 for the purpose of maintaining the vector in yeast cells, as shown in Losson et al.

Conclusion

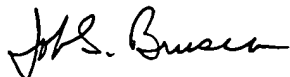
8. Certain papers related to this application may be submitted to Art Unit 1636 by facsimile transmission. For routine submissions the FAX number is (703) 308-4242. For FAX transmissions in cases in which the Examiner has been notified by phone to expect the transmission, the FAX number is (703) 305-7939. In such cases please call the Examiner at (703) 308-4231 at the time of transmission to expedite delivery of the fax. The faxing of such

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papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 CFR 1.6 (d)). NOTE: If applicant *does* submit a paper by FAX, the original copy should be retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED, so as to avoid the processing of duplicate papers in the Office.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Brusca, Ph.D. whose telephone number is (703) 308-4231. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Elliott, Ph.D., can be reached at (703) 308-4003.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.



John S. Brusca, Ph.D.

Examiner